#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#
Welcome to the March 2004 issue of the Environmental Health Educators Quarterly (EHEQ), an email based newsletter with resources for students, educators, and the public on environmental health, cancer prevention and bioscience. EHEQ is sponsored by the Community Outreach and Education Program (COEP) of the Center for Research on Environmental Disease (CRED) at The University of Texas M. D. Anderson Cancer Center, Science Park, Research Division, Smithville and the College of Pharmacy at UT Austin and funded through support from the National Institute of Environmental Health Sciences (Grant no. ESO7784) Anyone wishing to be deleted from or added to the mailing list for this publication should send an email to: dcook@sprd1.mdacc.tmc.edu.

Visit the Center for Research on Environmental Disease on the web at http://sciencepark.mdanderson.org/cred/
#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#|#

News in this issue:
1. Genetics Home Reference of the National Library of Medicine
2. Tobacco Free Kids
3. Quiz on Genetics and Inheritable Diseases
4. Science News Network?
5. University of Colorado Biosciences Initiative

1. Genetics Home Reference of the National Library of Medicine. (High School through College Level) For students inquiring about diseases that may have a genetic basis, there is now a website at the National Library of Medicine http://ghr.nlm.nih.gov/ghr/page/Home. While the site is user-friendly, it does take a bit of diligence to sift through the enormous volume of data and to learn how to navigate the screens. Perhaps the best part of the site for basic education can be found by clicking on "Understanding Genetics" in the top navigation bar. This brings up a "Table of Contents" which lists many options that constitute a fairly extensive primer on genetics.   One choice in "Chapter One" called "What is a Cell?" has excellent graphics with annotated images that identify cell components such as cytoplasm, Golgi apparatus and mitochondria.

-=-=thymine -=-=-=-=guanine -=-=-=-= cytosine -=-=-= adenine -=-=-=-=

2. Tobacco Free Kids ? (Middle School through College Level educators) There is no question that the largest single avoidable cluster of diseases stems from tobacco use. The website http://www.tobaccofreekids.org/ profiles tobacco use by children and adults on a state-by-state basis. Students visiting the site can gather data on the prevalence of smoking, its costs, mortality rates and cessation statistics by state. Also interesting is a progress report on how monies from cigarette company court settlements were distributed for tobacco prevention and other programs. Quite alarming is the finding that most states have failed to use the funds to protect kids.

=-=DNA -=-=-=enzymes -=-=-= peptides -=-=-= ligands -=-=-= RNA -=-=-=

3. Quiz on Genetics and Inheritable Diseases ? (High School through College Level)
The University of Arizona Biology Project has a great tool for learning and testing knowledge of genetics. Teachers may take the quiz themselves or send their science whiz kids or AP students to take the college level quiz. At the site, visitors can click on their answer that will either be "Correct" or, for a wrong answer, an explanation of the correct choice is provided. The site lets a visitor take a quiz on topics such as "What is behind Down's Syndrome?" and "Who is not the father of my grandson?" If you get 15 out of the 19 correct on the first try, you are ahead of 98% of the public in terms of genetic knowledge. Crown yourself a Gene Genius. For problems and answers go to:
http://www.biology.arizona.edu/human_bio/problem_sets/human_genetics/human_genetics.html

=-=--=-oncology=-=-=-=-=-epidemiology=-=-=-=-cardiology =-=-=-=-histology

4. Science News Network?! (Elementary Grades K-5)
NASA's KSNN? stands for Kids Science News Network. The site has a TV news program format that uses animated characters (for grades K-2) and web and video technology (for grades 3-5) to help children understand the everyday physical phenomena of our world. For grades K-2, animated characters (Barkley and Ted Tunes) introduce students to such concepts as magnetism, states of matter, and time. For grades 3-5, the site uses video news clips featuring young students investigating such questions as "What makes popcorn pop?" and "Why are bubbles round?"

Visit the site at http://ksnn.larc.nasa.gov/home.html for activities and resource links to age-appropriate science topics. NASA's KSNN? is not just about NASA programs. It invites anyone who wants to know how things work or what makes things happen to experience a new adventure in learning.

=-=-=-alopecia =-=-=-=formication=-=-=-=aphasia=-=-=-=-dysplasia=-=-=-=-

5. University of Colorado Biosciences Initiative (Secondary students and Teachers in
Health and Science) The Biosciences Initiative at the University of Colorado has a broad range of online resources to support learning in biology. A subset of the website is for K-12 teachers. While much of the site describes resources available in the Greater Denver area, there is also some excellent web links for the high school grades in bioscience.

Visit http://www.colorado.edu/Outreach/BSI/k12activities/activities.html for activities, resources and lesson plans on biotechnology, evolution, forensic science, diabetes and cystic fibrosis. The material on cystic fibrosis could be used to study several different sub areas such as pulmonary lung function, salt balance in the body, membrane function and the role of mutations in disease. Case studies that introduce topics such as Koch's postulates on the cause of disease, genetic counseling and disease genealogy may be printed as pdf files. =-=-=cytoplasm=-=-=-=-=nucleus=-=-=-=-=-mitochondria=-=-=-=-=chromosomes

=-=

DISCLAIMER: Mention of citations, Internet sites, references or points of view does not imply endorsement or agreement by the Center for Research on Environmental Disease or its funding entities. Please note that links may become unavailable over time.

The Center for Research on Environmental Disease has 50 scientists studying the interaction among genetic makeup of the individual, environmental exposures and behavior/age. The scientists are in three locations: The University of Texas at Austin, College of Pharmacy; The U.T. M.D. Anderson Cancer Center in Houston; and the Science Park Research Division of M. D. Anderson near Smithville, TX. We welcome comments and feedback to the email address: cred@sprd1.mdacc.tmc.edu

Anyone wishing to be deleted from receiving the quarterly email letters should send an email to: dcook@sprd1.mdacc.tmc.edu